

(19)



(11)

EP 1 107 504 B1

(12)

## EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention  
of the grant of the patent:  
**21.03.2007 Bulletin 2007/12**

(51) Int Cl.:  
**H04L 9/08 (2006.01)**

(21) Application number: **00480089.2**

(22) Date of filing: **28.09.2000**

### (54) Method of updating encryption keys in a data communication system

Verfahren zur Aktualisierung von Geheimschlüsseln in einem Datenkommunikationssystem

Procédé de mise à jour de clés de chiffrage dans un système de communication de données

(84) Designated Contracting States:  
**DE FR GB**

(56) References cited:

**EP-A- 1 032 159 WO-A-98/51035**  
**US-A- 4 157 454 US-A- 4 661 657**  
**US-A- 5 995 624**

(30) Priority: **02.12.1999 EP 99480123**

- ZIV J ET AL: "COMPRESSION OF INDIVIDUAL SEQUENCES VIA VARIABLE-RATE CODING" IEEE TRANSACTIONS ON INFORMATION THEORY, IEEE INC. NEW YORK, US, vol. IT-24, no. 5, September 1978 (1978-09), pages 530-536, XP000565213 ISSN: 0018-9448
- SCHNEIER: "Applied Cryptography, Second Edition" 1996 , JOHN WILEY & SONS , NEW YORK XP002249710 \* page 180, line 23 - line 34 \*
- TAKAYA YAMAZATO; IWAO SASASE; SHINSAKU MORI: 'INTERLACE CODING SYSTEM INVOLVING DATA COMPRESSION CODE, DATA ENCRYPTION CODE AND ERROR CORRECTING CODE' IEICE TRANSACTIONS ON COMMUNICATIONS vol. E75-B, no. 6, 01 June 1992, COMMUNICATIONS SOCIETY, TOKYO, JP, pages 458 - 465, XP000310869
- PATENT ABSTRACTS OF JAPAN vol.018, no.230 (E-1542) 26 April 1994 & JP 06 021 854 A (MATSUSHITA ELECTRIC IND CO LTD) 28 January 1994
- PATENT ABSTRACTS OF JAPAN vol.010, no.244 (E-430) 22 August 1986 & JP 61 073 445 A (NEC CORP) 15 April 1986
- PATENT ABSTRACTS OF JAPAN vol.010, no.046 (E-383) 22 February 1986 & JP 60 200 628 A (FUJITSU LTD) 11 October 1985

(43) Date of publication of application:  
**13.06.2001 Bulletin 2001/24**

(73) Proprietor: **International Business Machines Corporation**  
**Armonk, NY 10504 (US)**

(72) Inventors:

- Benayoun, Alain  
06800 Cagnes-sur-Mer (FR)
- Le Pennec, Jean François  
06100 Nice (FR)
- Michel, Patrick  
06610 La Gaude (FR)

(74) Representative: **Etorre, Yves Nicolas**  
**Compagnie IBM France,**  
**Département Propriété Intellectuelle**  
**06610 La Gaude (FR)**

EP 1 107 504 B1

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).























